

## **MEDICAL CONTROL GUIDELINE : CARDIAC MONITORING / ECG**

### **PRINCIPLES:**

1. Continuous cardiac monitoring is a key component of a thorough patient assessment and treatment in the prehospital setting.
2. Continuous observation of a patient's cardiac rhythm ensures early identification of potentially lethal dysrhythmias and provides other information about the patient's condition to guide treatment and destination decisions.
3. Complete and accurate ECG documentation is essential for patient care and quality improvement purposes.
4. The 12-lead electrocardiogram (ECG) in the prehospital care setting plays a key role in determining the most appropriate treatment and destination for patients with suspected cardiac symptoms.
5. Prehospital identification and communication of ST-elevation myocardial infarction (STEMI) can reduce critical "door-to-intervention" times for STEMI patients.
6. When a 12-lead ECG is indicated, it should be obtained early in the assessment so necessary medical treatment is not delayed in order to obtain an ECG on the unstable patient.
7. A good quality 12-lead ECG is a key component of a thorough patient assessment. A good quality 12-lead ECG includes the presence of all 12-leads on the ECG tracing and absence of artifacts and/or wavy baseline.

### **GUIDELINES:**

1. Once cardiac monitoring is determined to be necessary, observe the rhythm continuously and leave the monitor in place until care has been transferred to appropriate hospital personnel or as directed by the base hospital.
2. Document the ECG interpretation on the appropriate section in the EMS Report Form or Electronic Patient Care Report (ePCR). If a dysrhythmia is identified, provide an ECG strip labeled with the patient's name, sequence number, date and time to the receiving facility (in either paper or electronic format) as part of the patient's prehospital medical record. Retain a copy per the provider agency's departmental policy.
3. Perform a prehospital 12-lead ECG on patients with any of the following:
  - a. Chest pain/discomfort/symptoms of suspected cardiac etiology
  - b. Medical history with high risk of acute cardiac event
  - c. New onset dysrhythmia
  - d. Return of spontaneous circulation (ROSC) after a cardiac arrest, if able
4. Treat symptoms and rhythms identified according to applicable treatment protocols.

5. Maintain the patient's privacy and dignity while performing the 12-lead ECG.
6. Contact the SRC if the 12-lead ECG tracing has greater than 1mm ST-segment elevation in 2 or more contiguous leads and/or if computer analysis indicates "Acute MI" (or manufacturer's equivalent). Transmit the ECG tracing to the SRC receiving the patient. Discuss with receiving SRC ED physician.
7. Report to the Base Hospital shall include the software interpretation, paramedic interpretation, any quality issues and if there is an underlying paced rhythm of the 12-lead ECG.